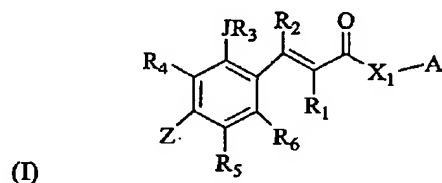


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of the claims in the application:

1. (Currently Amended) A compound of the formula:



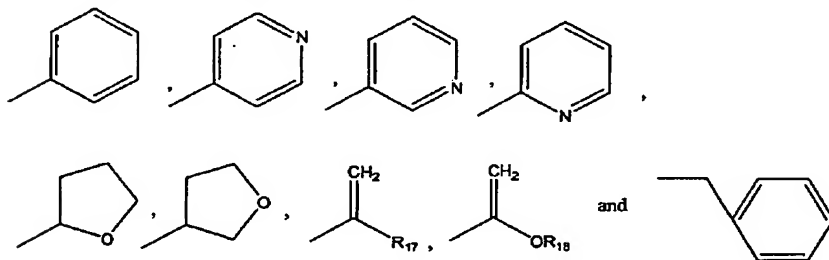
wherein:

R_1 and R_2 are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, ~~each of which can be substituted or unsubstituted~~; straight or branched, C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls and $-(CR_{15}R_{16})_p-D$;

wherein: R_{15} and R_{16} are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, ~~each of which can be substituted or unsubstituted~~; straight or branched; and C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls;

p is a positive integer from 1 to about 12;

D is selected from among -SH, -OH, X_2 , -CN, -OR₁₉, NHR₂₀,



wherein:

R_{17} is H, CH_3 or X_3 ;

R_{18} is H, a C_{1-4} alkyl or benzyl;

R_{19} is H, a C_{1-4} alkyl, X_2 or benzyl;

R_{20} is H, a C_{1-10} alkyl or $-C(O)R_{21}$,

wherein R_{21} is H, a C_{1-4} alkyl or alkoxy, t-butoxy or benzyloxy;

X_2 and X_3 are independently selected halogens;

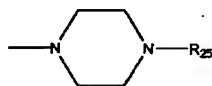
R_3 is H, CH_3 , or $-C(=O)(CR_{15}R_{16})_w-D$,

where w is 0 or an integer from 1 to about 12, and D is H or as described for R_1 and R_2 .

J is O, NH or S;

R_4 , R_5 , and R_6 are independently selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched; C_2 - C_{10} heteroalkyls, heteroalkenyls or heteroalkynyls and halogens;

Z is NR_7R_8 or



wherein R_7 is selected from among H, CH_3 , C_2 - C_{10} alkyls, alkenyls or alkynyls which can be substituted or unsubstituted; straight or branched; C_2 - C_{10} heteroalkyls, heteroalkenyls or heteroalkynyls, or $-(CR_{23}R_{24})_q$ -aryl, or R_8 ,

wherein R_{23} and R_{24} are independently selected from the group consisting of H and C_1 - C_{10} alkyls;

q is an integer from 1 to about 6;

R_8 is selected from the group consisting of $(CR_9R_{10})_n-NR_{22}-R_{11}$, $(CR_9R_{10})_n-CH_2-NHC(O)R_{26}$ and $(CR_9R_{10})_n-CH_2-E$;

wherein R_9 and R_{10} are independently selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched; C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls and halogens;

R_{26} is H, CH_3 , O-*t*-butyl, O-benzyl;

E is OH, SH or O-C(O) R_{27} ,

wherein R_{27} is a C_1 - C_6 alkyl, benzyl or phenyl;

R_{22} is H or CH_3 ;

n is a positive integer from 1 to about 10;

R_{11} is H or -L-B,

wherein L is a linker selected from the group consisting of succinimides, maleimides, imidoesters, 2-iminothiolane, hydrazides, maleic anhydride, azides, citraconic anhydride, glutaraldehyde and N-hydroxysuccinimidyl;
for linking NR_{22} to B; and

B is a first active moiety, reactive group moiety or a polymer selected from the group consisting of antibodies, antibody fragments, single chain antibodies, proteins, nucleic acids,

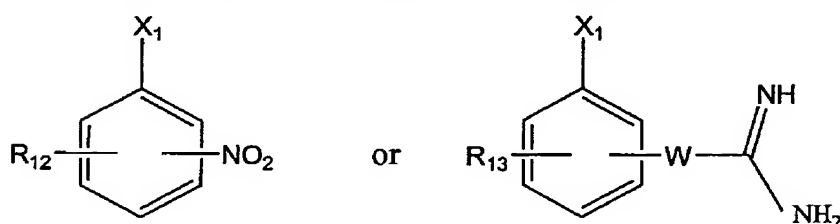
lectins, lipids, carbohydrates, polyalkylene oxides, glycosaminoglycans, poly-aspartic acid, poly-L-lysine, polyvinylpyrrolidone, collagen, peptides, hormones, ligands for receptors, growth factors, interferons, cytokines, metabolites that bind to a cell surface receptor, sugar peptides, polyethylene glycol polymers, polyethylene glycol polymer derivatives, polyglutamic acids, inhibitors of cell surface enzymes, and dextrans;

R_{25} is H, $-C(O)-R_{28}$ or $-C(O)-O-R_{29}$,

wherein R_{28} is a C_1-C_6 alkyl or benzyl; and R_{29} is CH_3 , t-butyl or benzyl;

X_1 is O, NH, or S; and

A is H, a second active moiety or A_1 wherein X_1A_1 is



wherein R_{12} and R_{13} are independently H or electron donating or electron withdrawing groups and W is CH or N.

2. (Original) The compound of claim 1, wherein Z is NR_7R_8 .
3. (Original) The compound of claim 2, wherein R_8 is $-CH_2-CH_2-NH_2$.
4. (Original) The compound of claim 2, wherein R_8 is $(CR_9R_{10})_n-NR_{22}-R_{11}$.
5. (Currently amended) The compound of claim 1, wherein ~~B~~ L is a maleimidyl or an N-hydroxysuccinimidyl group.
6. (Previously presented) The compound of claim 4, wherein R_{11} is a polyalkylene oxide residue.
7. (Original) The compound of claim 6, wherein said polyalkylene oxide residue is a polyethylene glycol.
8. (Original) The compound of claim 7, wherein said polyethylene glycol has a number average molecular weight of from about 2,000 to about 200,000 daltons.

9. (Previously presented) The compound of claim 4, wherein R_{11} is a member of the group consisting of collagen, glycosaminoglycan, poly(-aspartic acid), poly(-L-lysine), poly(-lactic acid), poly-N-vinylpyrrolidone and copolymers of poly(-lactic acid) and poly(-glycolic acid).

10. (Original) The compound of claim 1, wherein R_1 , R_2 , R_3 , R_4 , R_5 , and R_6 are independently selected from the group consisting of H, CH_3 and CH_3CH_2 .

11. (Original) The compound of claim 4, wherein R_7 is CH_3CH_2 ; R_8 is $-(CR_9R_{10})_n-NR_{22}-R_{11}$; and R_9 and R_{10} are H; n is 2; and X_1 is O, S or NH.

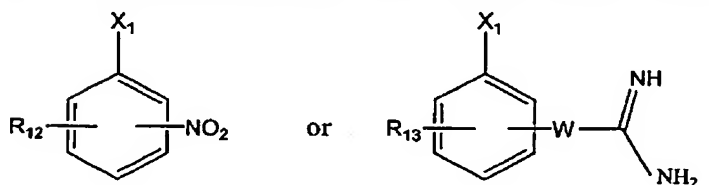
12. (Original) The compound of claim 4, wherein R_7 is CH_3CH_2 ; R_8 is $-(CR_9R_{10})_n-NR_{22}-R_{11}$ and R_9 and R_{10} are H.

13. (Withdrawn) The compound of claim 1, wherein said second active moiety comprises a member of the group consisting of X_1A_1 or X_1A_2 wherein

X_1A_1 is a substrate or substrate analog selected from the group consisting of amino acids, amino acid derivatives, peptides, peptide derivatives and substrates or substrate analogs for serine proteases, cysteine proteases, esterases, lipases, or other enzymes containing an active site serine or cysteine; and

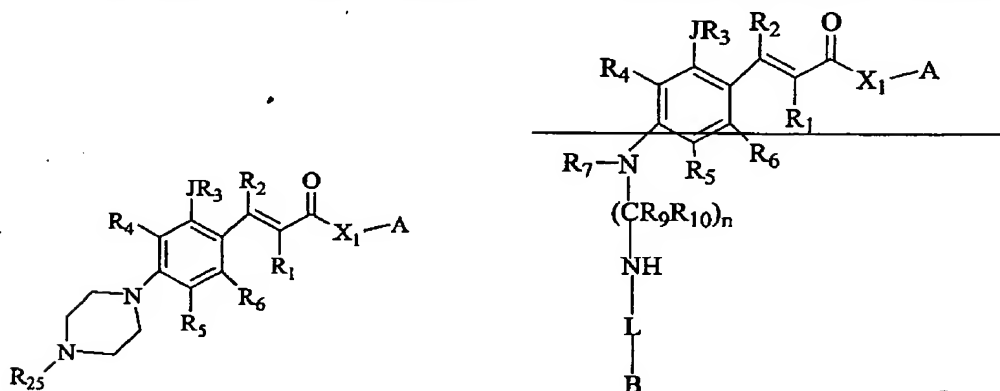
X_1A_2 is an enzyme.

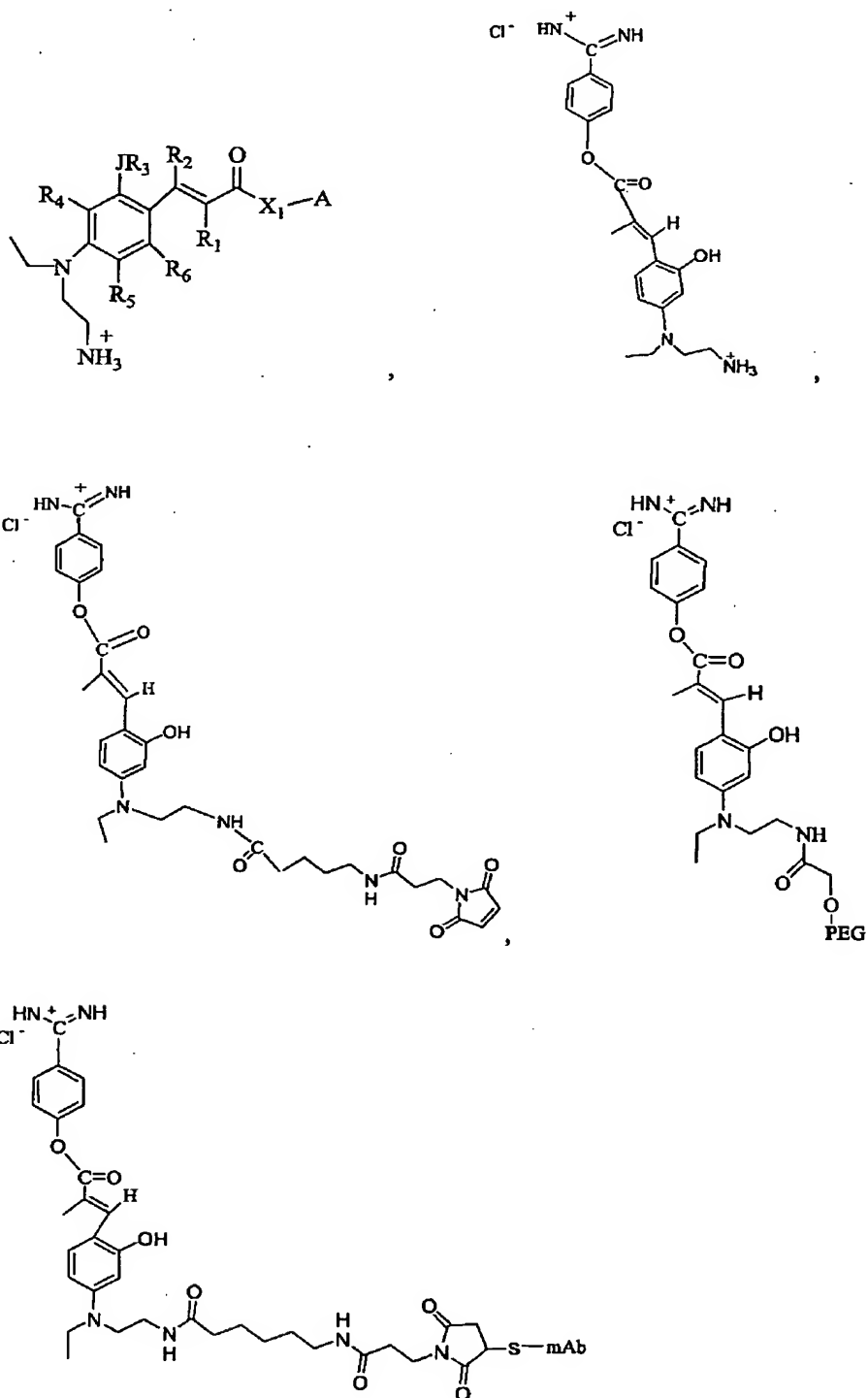
14. (Previously presented) The compound of claim 1, wherein X_1A is



15. (Withdrawn) The compound of claim 13, wherein A_2 is an enzyme selected from the group consisting of serine proteases, cysteine proteases, esterases, lipases and enzymes containing an active-site serine or cysteine.

16. (Original) The compound of claim 14, wherein J is O, R₂ is H, R₇ is CH₃CH₂; R₈ is -(CR₉R₁₀)_n-NR₂₂-R₁₁, R₉ and R₁₀ are H, and n is 2.
17. (Withdrawn) The compound of claim 15, wherein X₁A₂ is an enzyme having an active-site serine or cysteine.
18. (Withdrawn) The compound of claim 11, wherein X₁A₂ is a blood coagulation factor.
19. (Withdrawn) The compound of claim 11, wherein the enzyme is selected from the group consisting of plasmins, urokinases, and tissue plasminogen activators.
20. (Withdrawn) The compound of claim 13, wherein X₁A₁ is an amino acid, peptide, or substrate or substrate analog capable of interacting with an enzyme.
21. (Withdrawn) The compound of claim 20, wherein said amino acid is selected from the group consisting of isoleucine, phenylalanine, tyrosine, lysine, arginine, aspartate, glutamate, glutamine and asparagine.
22. (Currently amended) A compound of claim 1 selected from the group consisting of:



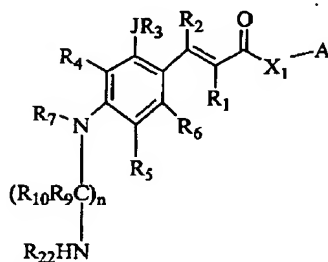


wherein

PEG is a polyethylene glycol having a molecular weight of from about 2,000 to about 200,000; and

mAb is a monoclonal antibody.

23. (Withdrawn) The compound of claim 22, wherein said monoclonal antibody is trastuzumab.
24. Cancelled
25. (Original) A pharmaceutically acceptable salt of the compound of claim 1.
26. (Withdrawn) A method of treatment, comprising:
administering to a mammal in need of such treatment an effective amount of a compound of claim 1, where B is a first active moiety.
27. (Withdrawn) The method of claim 26, further comprising exposing the compound of claim 1 to an energy source after administration to said mammal.
28. (Withdrawn) The method of claim 27, wherein the energy source is white light having a wavelength in the range from 340 to 700 nm.
29. (Withdrawn) The method of claim 27, wherein the energy source is white light having a wavelength in the range from 350- 420 nm.
30. (Withdrawn) The method of claim 27, wherein the energy source is selected from the group consisting of microwave, ultrasound, radio energy, gamma radiation, radioactivity, ultraviolet light and infrared light.
31. (Currently amended) A method of preparing a conjugate, comprising:
reacting a compound of Formula (IV)



(IV)

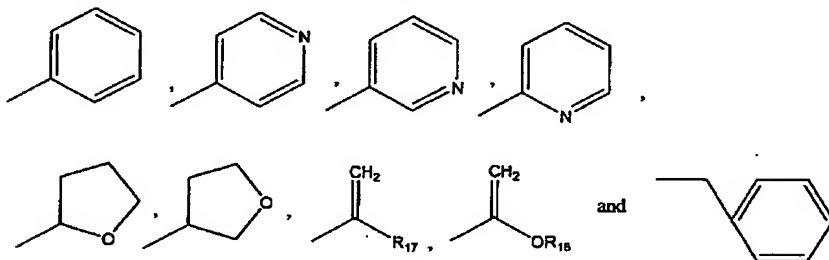
wherein:

R_1 and R_2 are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched, C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls and $-(CR_{15}R_{16})_p$ -D

wherein: R_{15} and R_{16} are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls and C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched; and C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls;

p is a positive integer from 1 to about 12;

D is selected from among -SH, -OH, X_2 , -CN, $-OR_{19}$, NHR_{20} ,



wherein:

R_{17} is H, a CH_3 or X_3 ;

R_{18} is H, a C_{1-4} alkyl or benzyl;

R_{19} is H, a C_{1-4} alkyl, X_2 or benzyl;

R_{20} is H, a C_{1-10} alkyl or $-C(O)R_{21}$

wherein R_{21} is H, a C_{1-4} alkyl or alkoxy, t-butoxy or benzyloxy;

X_2 and X_3 are independently selected halogens;

R_3 is H, CH_3 , or $-C(=O)(CR_{15}R_{16})_w$ -D,

where w is 0 or an integer from 1 to about 12, and D is H or as described for R_1 and R_2 .

J is O, NH or S;

R_4 , R_5 and R_6 independently selected from the group consisting of H, CH_3 ,

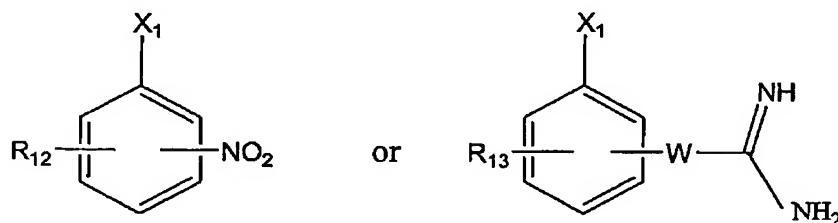
C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, each of which can be substituted or unsubstituted; straight or branched; C_2 - C_{10} heteroalkyls, heteroalkenyls or heteroalkynyls and halogens;

R_7 is selected from among H, CH_3 and C_2 - C_{10} alkyls;

X_1 is O, NH, or S;

R_{22} is H or CH_3 ; and

A is H ~~an active moiety~~ or A_1 wherein X_1A_1 is



wherein R_{12} and R_{13} are independently H or electron donating or electron withdrawing groups and W is CH or N;

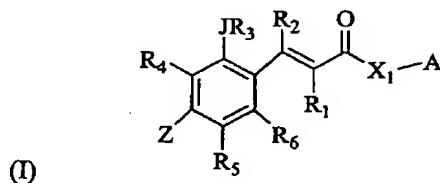
with a linking reagent containing a member of the group consisting of succinimides, maleimides, imidoesters, 2-iminothiolane, hydrazides, maleic anhydride, azides, citraconic anhydride, glutaraldehyde compound of the Formula (V):

(V) — L_1 - B_1

wherein L_1 is a moiety containing a functional group capable of reacting with the NHR_{22} of Formula (IV);

and B_1 is selected from the group consisting of polymers, biologically active materials and polymeric supports.

32. (New) A compound of the formula:



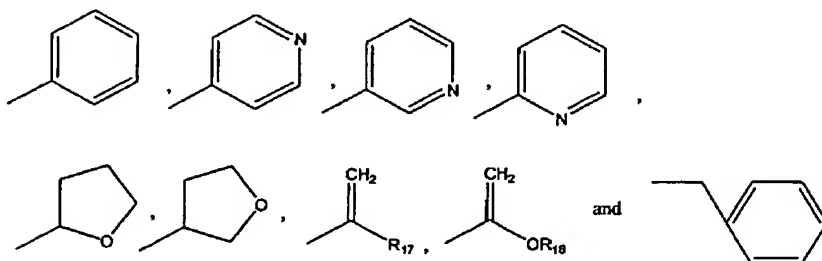
wherein:

R_1 and R_2 are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, straight or branched, C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls and $-(CR_{15}R_{16})_p-D$;

wherein: R_{15} and R_{16} are individually selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, straight or branched; and C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls;

p is a positive integer from 1 to about 12;

D is selected from among -SH, -OH, X_2 , -CN, -OR₁₉, NHR₂₀,



wherein:

R_{17} is H, CH_3 or X_3 ;

R_{18} is H, a C_{1-4} alkyl or benzyl;

R_{19} is H, a C_{1-4} alkyl, X_2 or benzyl;

R_{20} is H, a C_{1-10} alkyl or -C(O) R_{21} ,

wherein R_{21} is H, a C_{1-4} alkyl or alkoxy, t-butoxy or benzyloxy;

X_2 and X_3 are independently selected halogens;

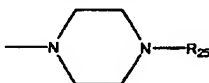
R_3 is H, CH_3 , or -C(=O)($CR_{15}R_{16}$)_w-D,

where w is 0 or an integer from 1 to about 12, and D is H or as described for R_1 and R_2

J is O, NH or S;

R_4 , R_5 , and R_6 are independently selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, straight or branched; C_2 - C_{10} heteroalkyls, heteroalkenyls or heteroalkynyls and halogens;

Z is NR_7R_8 or



wherein R_7 is selected from among H, CH_3 , C_2 - C_{10} alkyls, alkenyls or alkynyls straight or branched; C_2 - C_{10} heteroalkyls, heteroalkenyls or heteroalkynyls, or -($CR_{23}R_{24}$)_q-aryl, or R_8 ,

wherein R_{23} and R_{24} are independently selected from the group consisting of H and C_1 - C_{10} alkyls;

q is an integer from 1 to about 6;

R_8 is selected from the group consisting of (CR_9R_{10})_n-NR₂₂- R_{11} , (CR_9R_{10})_n-CH₂-NHC(O) R_{26} and (CR_9R_{10})_n-CH₂-E;

wherein R_9 and R_{10} are independently selected from the group consisting of H, CH_3 , C_2 - C_{10} alkyls, C_2 - C_{10} alkenyls or C_2 - C_{10} alkynyls, straight or branched; C_2 - C_{10} heteroalkyls, C_2 - C_{10} heteroalkenyls or C_2 - C_{10} heteroalkynyls and halogens;

R_{26} is H, CH_3 , O-t-butyl, O-benzyl;

E is OH, SH or $O-C(O)R_{27}$,

wherein R_{27} is a C_1 - C_6 alkyl, benzyl or phenyl;

R_{22} is H or CH_3 ;

n is a positive integer from 1 to about 10;

R_{11} is H or -L-B,

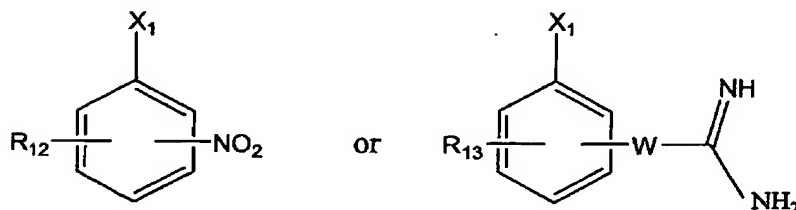
wherein L-B are maleimides, N-hydroxysuccinimidyl compounds, imidoesters, 2-iminothiolane, hydrazides and maleic anhydride;

R_{25} is H, $-C(O)R_{28}$ or $-C(O)OR_{29}$,

wherein R_{28} is a C_1 - C_6 alkyl or benzyl; and R_{29} is CH_3 , t-butyl or benzyl;

X_1 is O, NH, or S; and

A is H, or A_1 wherein X_1A_1 is



wherein R_{12} and R_{13} are independently H or electron donating or electron withdrawing groups and W is CH or N.

33. (New) The compound of claim 1, wherein said antibodies are monoclonal antibodies.
34. (New) The compound of claim 33, wherein the monoclonal antibody is trastuzumab.
35. (New) The method of claim 31, wherein the linking reagent is selected from the group consisting of heterobifunctional reagents containing N-hydroxysuccinimide and maleimide, bifunctional maleimide and bifunctional PEG's.
36. (New) The method of claim 35, wherein the heterobifunctional reagent containing N-hydroxysuccinimide and maleimide is (Succinimidyl-6-[(β -maleimidopropionamido) hexanoate].